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BAQ Engineering Services Division

**Company Name** Solvay USA, Inc. - Spartanburg Site  
**Permit Number:** 2060-0135

**Permit Writer:** Kirk Schneider  
**Date:** **DRAFT**

**SIC CODE: 2843****DATE APPLICATION RECEIVED:** June 30, 2017**DATE OF LAST INSPECTION**

The last comprehensive inspection took place on December 5, 2013 and a Risk Management Inspection took place on November 17, 2016. No violations of permit conditions or applicable regulations were observed during the inspections.

**FACILITY DESCRIPTION**

Alkoxylated hydrophobes and surfactants manufacturer

**PROJECT DESCRIPTION**

State Operating permit renewal to Conditional Major. In the application for the state operating permit renewal, this facility revised its worst case uncontrolled potential emissions calculations to reflect a single worst case product instead of using a worst case product mix to simplify its emission calculations. This change results in uncontrolled total HAP emissions greater than 25 tpy, as well as potential uncontrolled VOC emissions of greater than 100 tpy (since the VOC and HAP emissions overlap is +99% identical). This scenario is not a realistic operating scenario since this facility manufactures multiple type of products and due to batch operation could not operate in this mode 8,760 hr/yr. The existing state operating permit included HAP emission limits (which would have likewise limited potential VOC emissions) and all reported HAP emissions have been demonstrated to be consistently below major source HAP thresholds. This facility will continue to comply with these HAP limits.

**CHANGES SINCE LAST OP ISSUANCE**

- Added 15,000 gallon Raw Material Storage Tank 61 and 15,000 gallon Raw Material Storage Tank 62 to Exempt List
- Removed Storage Tanks T-7, T-8, T-10 and T-11 from the Exempt List as requested by the facility as these tanks have been removed from the site.
- 4,000 gallon Reactor R-9 replaced with 6,000 gallon Reactor in 2013
- 7,000 gallon Reactor R-11 replaced with {10,000} Reactor in 2015
- Voided Emission Unit 09 and added T-24, T-27, T-28, T-29, T-41, T-42, T-43, T-26, T-54 and T-56 to Exempt List

**EXEMPT SOURCES**

Equip ID	Exempt Source Description	Basis
B-EX	1.26 Million Btu/hr Semi-Works Facility Boiler	SC Regulation 61-62.1, Section II(B)(2)(a)
SWF	Semi-Works Facility consisting of: 15 Gallon High Temperature Reactor (15R) 75 Gallon Multi-Purpose Reactor (R75) 150 Gallon High Temperature Reactor (R150) 300 Gallon Multi-Purpose Reactor (R300)	SC Regulation 61-62.1, Section II(B)(2)(h)



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Equip ID	Exempt Source Description	Basis
MT-1	350 Gallon Mix Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
MT-2	2,000 Gallon Mix Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-1	6,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-2	6,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-3	8,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-4	8,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-5	6,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-6	8,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-12	330 Gallon Propane Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-14	2,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-15	2,700 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-16	3,200 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-17	3,200 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-18	3,200 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-19	3,100 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-20	12,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-21	12,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-22	12,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-23	12,000 Gallon Storage Tank, Replaced in 2003	SC Regulation 61-62.1, Section II(B)(2)(h)
T-25	850 Gallon Acetic Acid 84% Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-30	6,000 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-31	6,000 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-32	3,000 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)



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Equip ID	Exempt Source Description	Basis
UT-33	3,000 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-34	3,000 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
UT-35	3,000 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-36	6,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-37	30,000 Gallon Underground Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-38	30,000 Gallon Underground Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-39	600 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-40	600 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-40A	150 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-44	10,500 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-45	10,500 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-46	10,500 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-47	10,500 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-48	10,500 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-49	10,500 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-50	12,000 Gallon No.2 Fuel Oil Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-51	290 Gallon Portable Diesel Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-52	12,000 Gallon 19% Ammonium Hydroxide Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-53	11,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-55	13,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-57	13,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
TK-58	12,000 Gallon Allyl Alcohol Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-59	290 Gallon Waste Oil Storage Tank (March 2004)	SC Regulation 61-62.1, Section II(B)(2)(h)
MILK T1	900 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
MILK T2	900 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)



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Equip ID	Exempt Source Description	Basis
MILK T3	900 Gallon Compartment Horizontal Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
HWVS	Tank Farm #1 Hot Water Maker System	SC Regulation 61-62.1, Section II(B)(2)(g)
TCRS	Tank Car Receiving Station	SC Regulation 61-62.1, Section II(B)(2)(h)
FSSE	2,000 GPM Fire Suppression System with 208 Hp Diesel Engine and 250 gallon Diesel Fuel Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(f)(ii)
CT	Four - Cooling Towers	SC Regulation 61-62.1, Section II(B)(2)(g)
SWFLFH	Semi-Works Facility Laboratory Fume Hoods	SC Regulation 61-62.1, Section II(B)(2)(e)
QLFH	Four - QA/QC Laboratory Fume Hoods	SC Regulation 61-62.1, Section II(B)(2)(e)
T-61	15,000 gallon Raw Material Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-62	15,000 gallon Raw Material Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-24	20,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-27	20,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-28	20,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-29	20,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-41	20,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-42	20,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-43	20,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-26	24,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-54	21,500 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-55	13,000 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)
T-56	21,500 Gallon Storage Tank	SC Regulation 61-62.1, Section II(B)(2)(h)

## SPECIAL CONDITIONS, MONITORING, LIMITS

- This facility operates an Oxide Scrubber to control VOC and HAP emissions. In order to ensure that this control device is working properly, Condition 14 of the previous operating permit required this facility to install, operate, maintain and monitor daily a pressure drop indicator on the scrubber and Condition 15 of the previous operating permit required that the pH of the scrubber be monitored daily. This will be continued.

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- This facility operates an Afterburner with Scrubber to control VOC and HAP emissions. In order to ensure that the Afterburner portion is working properly, Condition 11 of the previous operating permit required this facility to install, operate, maintain and monitor at least every 15 minutes a temperature indicator on the combustion chamber. The Scrubber portion has a recirculating water loop with continuous makeup and blowdown. The pump has a pressure indicator and flow switch to indicate pump operation, but no flow rate monitoring device. Operational control is performed by manual adjustment of makeup water with a valve, but no flow rate monitoring device. Scrubber makeup water is set to keep the pH greater than or equal to 4. The monitored parameters for the scrubber are pump on and water pH greater than or equal to 4. Both are checked and recorded once per shift. If the pH is found to be less than 4, the makeup water flow is increased. This will be continued.
- Condition 13 of the previous operating permit, permits the venting of Ethylene gas to the atmosphere during the production of RHODOFAC LO-11ALA (LO), instead of venting to the afterburner control device. This condition also requires this facility to keep records of the number of batches of LO produced per month. This will be continued.
- Condition 7 of the previous operating permit limits the sulfur content of the No.2 Fuel Oil used in Boiler No.1, Boiler No.2, and Boiler No.3 to  $\leq 0.3\%$  sulfur content in order to comply with SC Standard 2. This will be continued for Boiler 3. This facility no longer burns No. 2 Fuel Oil in Boilers 1 and 2.

FACILITY WIDE EMISSIONS			
Pollutant	Emissions (tpy)		
	Uncontrolled	Controlled	Limited
PM	1.38	1.38	N/A
PM <sub>10</sub>	1.42	1.42	N/A
PM <sub>2.5</sub>	1.42	1.42	N/A
SO <sub>2</sub>	14.04	14.04	N/A
NO <sub>x</sub>	14.58	14.58	N/A
CO	9.93	9.93	N/A
VOC	170.2	8.07	100
Total HAP	169.70	7.50	25

**OPERATING PERMIT STATUS**

This facility operates under State Minor Source Operating Permit; issued on October 12, 2007 and expires September 2017. Due to the updated emissions, this facility will be issued a Conditional Major operating permit.



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## REGULATORY APPLICABILITY REVIEW

Regulations	Comments/Periodic Monitoring Requirements
Section II.E – Synthetic Minor	<p>This facility emits PM, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, CO, NO<sub>x</sub> and VOC which are PSD pollutants. Uncontrolled facility-wide emissions of these pollutants are less than 100 tpy except for VOC.</p> <p>This facility's potential uncontrolled VOC emissions are greater than 100 tpy but this facility will take a federally enforceable VOC emission limit to limits its potential to emit to less than 100 tpy to avoid Title V which can also be used to avoid PSD. This VOC limit will be public noticed to make it federally enforceable. This facility's potential to emit considering the federally enforceable VOC limit will be less than 100 tpy.</p>
Section II(G) Conditional Major	<p>This facility is eligible for a Conditional Major operating permit as uncontrolled emissions of PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, CO, NO<sub>x</sub> are each less than 100 tpy and total controlled VOC is less than 100 tpy. This facility will be assigned a Title V avoidance limit of 100 tpy for VOC emissions.</p> <p>This facility will have individual potential uncontrolled HAP emissions greater than 10 tpy and total uncontrolled HAP emissions greater than 25 tpy. This facility has previously taken limits to limit facility-wide individual HAP emissions to less than 10 tpy and less than 25 tpy for total HAP and will continue to comply with these limits.</p> <p>Compliance with the VOC and HAP limits is demonstrated by operating and maintaining VOC and HAP control devices and calculating annual VOC and HAP emissions.</p>
Standard No.1	<p>Boiler No.1, Boiler No.2, Boiler No.3 and the Semi-Works Facility Boiler each meet the definition of a fuel burning operation as specified by SC Regulation 61.62.1.</p> <p>The Semi-Works Facility Boiler is exempt as specified by SC Regulation 61-62.1, Section II(B)(2)(a).</p> <p>Each of the boilers are subject to Section I(B), Section I(C), Section II(A) and Section III.</p> <p>Each boiler is not required to have a COMS because they do not meet the size requirements specified by Section IV(A).</p> <p>A performance test for each boiler is not required because they do not meet the size requirements specified by Section VI(A).</p> <p>No periodic monitoring of each boiler is required by this standard.</p>





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## REGULATORY APPLICABILITY REVIEW

Regulations	Comments/Periodic Monitoring Requirements
Standard No.3 (state only)	<p>This facility uses an Afterburner to control VOC and HAP emissions. These VOC and HAP emissions do not come from the combustion of virgin fuel and so this standard is applicable. The Afterburner is classified as an industrial incinerator for the purpose of this standard.</p> <p>The Afterburner is subject to the opacity and PM limit specified in Section III(I). Compliance with the PM limit is determined by conducting a performance test. Section VIII(D)(5) requires that a performance test be conducted every 2 years for PM emissions from industrial incinerators but Section VIII(A) contains a provision that allows the Department to waive a test. The PM testing was waived for the incinerators because they are not controlling PM emissions.</p> <p>This facility is not required to keep records as specified by Section VI(C).</p> <p>This facility is not required to submit reports as specified by Section VI(D) because these only apply to sources incinerating hazardous or municipal waste.</p> <p>Per Section V(G)(1) and Section V(G)(2), this facility is not required to conduct waste analyses for each Heater.</p> <p>Section VI(A)(2)(h) states that continuous monitoring for industrial incinerators may be required as in Section VII(A)(2)(d) (Hazardous Waste) or Section VI(A)(2)(e) (Municipal Waste) depending on the material being incinerated or burned and source test results. Since the waste being incinerated is not a hazardous or municipal waste, monitoring is not required under either of these sections.</p> <p>The training of The Afterburner operators is exempted as specified by Section IX(D).</p>
Standard No.4	<p>This facility determined it would have not have any processes subject to Section VIII.</p> <p>Each piece of equipment was assigned the appropriate opacity limit as specified by Section IX based on their installation/modification dates except for the boilers and afterburner which have opacities specified in Standard 1 and Standard 3.</p> <p>All other sections of this regulation do not apply because they apply to types of equipment that this facility does not have. This facility also does not have any non-enclosed operations.</p>
Standard No.5	<p>This regulation applies to specific processes. This facility does not have any of the processes specified in this regulation.</p>



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## REGULATORY APPLICABILITY REVIEW

Regulations	Comments/Periodic Monitoring Requirements
Standard No.5.2	<p>This facility has the following sources that burn a fuel and emit NO<sub>x</sub>:</p> <p>(1) Boiler No.1, Boiler No.2 and Boiler No.3 - These sources were originally constructed prior to 2004, have NO<sub>x</sub> emissions not undergone a BACT review, do not qualify for any of the exemptions specified by Section I(b) and each is classified as an existing source as specified by Section I(a)(2). Section IV(a) states that existing sources are not subject to Standard 5.2 until their burner assemblies are replaced and none of the burner assemblies have not been replaced.</p> <p>(2) Semi-Works Facility Boiler – Exempt as specified by Section I(B)(1)</p> <p>(2) Fire Suppression System Diesel Engine - Exempt as specified by Section I(B)(1)</p>
Standard No.7	<p>This facility is specified as one of the 28 specific industry types (28xx SIC Codes) for PSD applicability which specifies a PSD applicability trigger of 100 tpy. This facility emits PM, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, CO, NO<sub>x</sub> and VOC which are PSD pollutants. Potential uncontrolled facility-wide emissions of these pollutants are each less than 100 tpy except for VOC.</p> <p>This facility's potential uncontrolled VOC emissions are greater than 100 tpy. The facility's potential VOC emissions have historically been limited by its HAP limits (since there is a virtual identity, +99%, for these two emissions), but this facility will also take a federally enforceable VOC emission limit to further reflect a limit of its potential to emit to less than 100 tpy to avoid Title V which can also be used to avoid PSD. This VOC limit will be public noticed to make it federally enforceable. This facility's potential to emit considering the federally enforceable VOC limit will be less than 100 tpy.</p>
61-62.6	<p>This facility does not have any processes capable of generating fugitive particulate matter emissions.</p>
40CFR60 and 61-62.60 Subpart Dc	<p>Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) was reviewed for applicability.</p> <p>This subpart is not applicable to Boiler No.1, Boiler No.2 and Boiler No.3 as specified by 60.40c(a) because their maximum design heat input capacities are less than the required minimum 10E+06 Btu/hr to be subject.</p>





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## REGULATORY APPLICABILITY REVIEW

Regulations	Comments/Periodic Monitoring Requirements
40CFR60 and 61-62.60 Subpart Kb	<p>Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984) was reviewed for applicability because this facility has storage tanks that store volatile organic liquids (VOL) as defined by 60.111b, were constructed during this time period and have capacities greater than or equal to 75 m<sup>3</sup>.</p> <p>All of this facility's storage tanks that store a VOL have capacities between 75 m<sup>3</sup> and 151 m<sup>3</sup>. Each tank stores a VOL with a maximum true vapor pressure of less than 15 kPa and so these tanks are not subject to this subpart as specified by 60.110b(b).</p>
40CFR60 and 61-62.60 Subpart VV and Subpart VVa	<p>Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after January 5, 1981, and on or Before November 7, 2006) and Subpart VVa (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006) were reviewed for applicability because this facility will have processes that were constructed and modified in both time frames.</p> <p>60.480(a)(1) and 60.480a(a)(1) state that the provisions of these subparts apply to affected facilities in the synthetic organic chemicals manufacturing industry. From 60.481 and 60.481a (Definitions) synthetic organic chemicals manufacturing industry means the industry that produces, as intermediates or final products, one or more of the chemicals listed in 60.489. This facility does not produce any of the chemicals listed in 60.489.</p>
40CFR60 and 61-62.60 Subpart NNN	<p>Subpart NNN (Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations) does not apply because this facility does not have any distillation operations.</p>
40CFR60 and 61-62.60 Subpart RRR	<p>Subpart RRR (Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes) was reviewed for applicability.</p> <p>60.700(a) (Applicability and Designation of Affected Facility) states that the provisions of this subpart apply to each affected facility designated in 60.700(b) that is part of a process unit that produces any of the chemicals listed in 60.707 as a product, co-product, by-product, or intermediate, except as provided in 60.707(c). This facility does not have any processes that produces any of the chemicals listed in 60.707.</p>



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Regulations	Comments/Periodic Monitoring Requirements
40CFR60 and 61-62.60 Subpart IIII	<p>Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) was reviewed for applicability because this facility has a fire suppression system powered by a diesel engine manufactured after July 1, 2006.</p> <p>As specified by 60.4200(a) and 60.4200(a)(2)(ii) the diesel engine is subject to this subpart. As specified by 60.4200(a)(4) the fire pump engine is also subject to 60.4208.</p> <p>As specified by 60.4209, the fire pump engine must meet the applicable monitoring requirements listed in 60.4209(a), 60.4209(b) and 60.4211. As specified by 60.4209(a), since the engine does not meet the standards applicable to non-emergency engines, this facility was required to install a non-resettable hour meter prior to startup of the engine. This facility will not use a diesel particulate filter and so 60.4209(b) does not apply to each engine.</p> <p>Since the engine is classified as an emergency engine, it must meet the emissions standards listed in Table 4 to Subpart IIII as specified by 60.4205(c) and the fuel requirement specified by 60.4207(b). As specified by 60.4211(c), compliance with the emission standards listed in Table 4 is demonstrated by the owner/operator purchasing an engine certified to the standards of 60.4205(c) which this facility has done.</p> <p>Since the fire pump engine must comply with the emission standards specified in this subpart, each engine is subject to operational requirements specified in 60.4211(a) and 60.4211(f).</p> <p>None of the notification, reporting, and recordkeeping requirements specified in 60.4214 apply to each fire pump engine.</p>
40CFR61 and 61-62.61	This facility does not have any sources that meet any of the applicability requirements of all the subparts contained in this regulation.
40CFR63 and 61-62.63 Major Source MACT	<p>This facility will have individual uncontrolled HAP emissions greater than 10 tpy and a total uncontrolled HAP emissions greater than 25 tpy.</p> <p>This facility already has been assigned HAP emission limits of less than 10 tpy for individual HAP and 25 tpy for total HAP and will continue to comply with these limits. Due to these limits this source is classified as an area source for MACT.</p>



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## REGULATORY APPLICABILITY REVIEW

Regulations	Comments/Periodic Monitoring Requirements
40CFR63 and 61-62.63 Major/Area Source MACT Subpart ZZZZ	<p>Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) was reviewed for applicability because this facility will have Fire Pump engines manufactured after July 1, 2006 and an emergency Backup generator powered by a Propane fueled engine manufactured after January 1, 2009.</p> <p>63.6590(c) states that an affected compression ignition engine source that meets any of the criteria in 63.5690(c)(1) through 63.6590(c)(7) must meet the requirements of this part by meeting the requirements of 40CFR60 Subpart IIII or Subpart JJJJ, and no further requirements apply for such engines under this subpart.</p> <p>Each Fire Pump Engine and the Backup generator engine each meet the criteria of 63.6590(c)(6), is subject to 40CFR60 Subpart IIII and Subpart JJJJ respectively and so no further requirements from this subpart apply to these engines.</p>
40CFR63 and 61-62.63 Area Source MACT Subpart JJJJJ	<p>It was determined that the Boiler No.1, Boiler No.2 and Boiler No.3 are not subject to Subpart JJJJJ (National Emission Standards for Hazardous Air Pollutants For Industrial, Commercial, and Institutional Boilers Area Sources).</p> <p>63.11193 states that a facility's boilers located at an area source are subject to this subpart except as specified in 63.11195.</p> <p>63.11195(e) states that a gas-fired boiler as defined in 63.11237 is not subject. Boiler No.1 and Boiler No.2 meet the definition of a gas-fired boiler as defined in 63.11237 and are not subject to this regulation. This facility wants the ability to use No.2 Fuel Oil as fuel whenever necessary for Boiler No.3 and so this boiler is subject to this regulation.</p>
40CFR63 and 61-62.63 Area Source MACT Subpart VVVVV	Subpart VVVVV (National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources) was reviewed for applicability. This facility does not meet all of the applicability requirements listed in 63.11494(a) to be subject to this regulation.
61-62.68	This facility stores Ethylene Oxide, Propylene Oxide and Allyl Alcohol, above the above their threshold quantities and so must have a Risk Management Plan.
40CFR64 (CAM)	CAM applies to each PSEU when it is located at major source that is required to obtain Title V permit. This facility is classified as a synthetic minor source and so this rule does not apply.



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**Permit Writer:** Kirk Schneider  
**Date:** **DRAFT**

**AMBIENT AIR STANDARDS REVIEW**

Regulations	Comments/Periodic Monitoring Requirements
Standard No.2	This facility has demonstrated compliance with this standard by using air dispersion modeling. See modeling summary dated October 5, 2017.
Standard No.7.c	<p>This facility is located in Spartanburg County. PSD minor source baselines for PM<sub>10</sub> and NO<sub>2</sub> were established for this county in 1992. No PSD minor source baseline for SO<sub>2</sub> has been established for this county.</p> <p>This facility demonstrated compliance with this standard using air dispersion modeling. See modeling summary dated October 5, 2017.</p>
Standard No.8 (state only)	This facility has demonstrated compliance with this standard by using air dispersion modeling. See modeling summary dated October 5, 2017.

**PUBLIC NOTICE**

This Conditional Major Permit will undergo a 30-day public notice period in accordance with SC Regulation 61-62.1, Section II.N. The comment period was open from December 4, 2017 to January 2, 2018 and was placed on the BAQ website during that time period.

**SUMMARY AND CONCLUSIONS**

It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.